him during his life. Of late years there has been a tendency to seek to do him fuller justice and to put a more liberal and more kindly interpretation upon his conduct and actions, and to place him in what is to be regarded as his true relation to his epoch. Prof. Stillman's book is the latest attempt at his rehabilitation. It is a scholarly contribution to a subject which has still its perplexities and difficulties. The story of his life is here told without bias, dispassionately, and in the light of all available information, and the result is an eminently readable monograph written in the true spirit of history.

T. E. THORPE.

The History of British Agriculture.

(1) *English Farming: Past and Present.* By the Rt. Hon. Lord Ernle. Third edition. Pp. xvi + 504. (London: Longmans, Green and Co., 1922.) 12*s.* 6*d.* net.

(2) *A Short History of British Agriculture.* By John Orr. Pp. 96. (London: Oxford University Press, 1922.) 2*s.* 6*d.* net.

(1) THE story of British agriculture is for the greater part of its course the story of the life of the ordinary Briton, for until the industrial and commercial era began a century ago the country was in the main agricultural. Several histories have appeared, but none is more attractive than the volume written by Lord Ernle, which has now reached its third edition. There are few records of actual farming prior to the Norman invasion, and the account here given begins practically in the thirteenth century, though there is no reason to suppose that any great change had been brought about in agricultural methods for a long while previously. From that time onwards, however, the story is continuous, though it has had to be pieced together from manorial records, old country sayings, illuminated MSS., and many other sources. Lord Ernle has done his work remarkably well, and he traces with great clearness the changes from the old open field system, through the enclosures of the sixteenth, seventeenth, and eighteenth centuries, to the great changes introduced in the nineteenth century, and finally to our own times.

The edition before us differs from the previous one in that it contains a chapter on war farming in 1914–1918. This was an essay in State control, and the measure of its unpopularity in the countryside was seen in the almost savage joy with which the wholesale retrenchment of the numerous inspecting officials after the war was hailed, and in the irresistible demand for the removal of all restrictions on freedom of cropping and of farm management. Whatever the urban voter may elect to bear in the way of State control of industry, it is perfectly certain that the countryman will have none of it: he is an incorrigible individualist.

Space does not allow of an adequate quotation from the account of the history of those eventful days. Lord Ernle has the double advantage of inside knowledge and of freedom from any restriction in relating the course of events, and he tells the story vividly. The real agricultural difficulty began in 1917, after the harvest of 1916. The Board of Agriculture had foreseen this and had prepared a scheme, but the Cabinet had not put it into operation. The winter 1916–17 was very unfavourable to the agriculturist; the supply of men, of feeding-stuffs and of fertilisers was short, and was diminishing, and farmers generally were losing heart. State control became imperative. The method adopted was probably as good as could be devised, and very full powers were given to the large body of experts brought in for the purpose. In spite of all its disadvantages and the increasing difficulties in regard to labour and materials, the system was successful in producing certain items of human food, as the following table proves:

Crops.	1918.	1916.	1904-13.	Increase.		Percentage of Increase.	
				Over 1916.	Over 1904-13.	Over 1916.	Over 1904-13.
(In Thousands of Quarters.)						%	%
Wheat . .	10,534	6,835	6,653	3,699	3,881	54	58
Barley . .	6,085	5,181	6,212	904	– 127	17	– 2
Oats . . .	14,336	10,411	10,572	3,925	3,764	38	36
Mixed Corn .	*620	*..	*..	620	620	..	..
Beans and Peas . .	1,328	1,122	1,529	206	– 201	18	– 13
Total. . .	32,903	23,549	24,966	9,354	7,937	49	32
(In Thousands of Tons.)							
Potatoes.	4,209	2,505	2,643	1,704	1,566	68	59

The present writer can testify, however, that the machine was kept going only by constantly reminding the rural community of the men in the trenches, and had it not been for the poignant sorrow and bitter tragedy of the war no power on earth would have kept the farmers to the programme. It is not that they are less patriotic than others, quite the contrary. But the system is not suited to the conditions of the countryside and so it lacks permanency. Post-war agriculture is adjusting itself to post-war economic conditions.

The volume is full of interest and will certainly appeal to a large body of readers.

(2) Teachers of agriculture generally will welcome the appearance of a little book on the history of the subject which they can place in the hands of their students, in the first instance to stimulate their interest, and afterwards as an introduction to larger works.

Mixed corn is shown separately in 1918. In previous years it is shown under wheat, barley, or oats.

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Mr. Orr's book can confidently be recommended for this purpose.

The book is simply written and can be read without any extensive knowledge of English history: it is unbiassed and, for its size, it gives as good an account as we have yet seen of the course of events in British farming from the earliest times to the present day. The illustrations are excellent and well chosen from a wide range of sources: they show, side by side, the older and the newer types of implements or of animals, and afford admirable demonstrations of the great changes that have taken place since agriculture began to develop.

In discussing the post-war period Mr. Orr ends on a note of subdued optimism which we hope and believe is justified: "The market for farm produce is weak. Agriculture must share the bad fortune as well as the good fortune of the country and even of the world. In view of the magnitude of the war its evil effects will probably be very great and very prolonged. But however difficult times may be, there is promise for the future in the better feeling that exists between landlords and tenants, employers and employed, as compared with that which prevailed a century ago. There has been no poor-law payment of wages, and the difference between the treatment of the labourer then and now is an indication of the progress that has been made."

E. J. RUSSELL.

Ore Deposits.

Abriss der Lehre von den Erzlagerstätten: In Anlehnung an die dritte Auflage des Lehrbuches und unter Benützung hinterlassener Aufzeichnungen. Von Prof. Richard Beck. Bearbeitet durch Georg Berg. Pp. xi + 408. (Berlin: Gebrüder Borntraeger, 1922.) 16*s*. 8*d*.

As is stated by Dr. Berg in his introduction, this work, an abstract of the study of ore deposits, is an abbreviation of the large work in two volumes by Richard Beck. The original work was well known, and three editions have been published since it was originally issued in 1900. The general principle of classification remains nearly the same as that in the original work, and it must be admitted that, generally speaking, the changes that have been made have not made for a clearer understanding of this exceedingly complex subject.

As in the original, a clear cut is made between epigenetic and syngenetic deposits; the author defines these phrases as follows: in the former he includes deposits into which ore has been introduced only after the formation of the immediately adjoining country rock, while the latter term is restricted to magmatic segregation in which the ore is formed simultaneously with the country rock. These basal definitions, however, are by no means satisfactory. The author's definition excludes from the syngenetic group sedimentary deposits, such as beds of ironstone deposited originally as bog ironstone, etc., and in fact Dr. Berg has treated such deposits quite separately from his syngenetic deposits and has placed them in his classification after the epigenetic deposits. Dr. Beck, on the other hand, looked upon such ores as syngenetic, and there is no doubt that his view is the sounder and leads to a clearer understanding of the entire subject.

Again, Dr. Berg devotes a separate section to the Gozzans or alteration products of existing ore deposits, formed above permanent water level, which may include both secondary enrichment and impoverishment of the deposits in respect of their metallic contents. He classifies these deposits as epigenetic on the grounds that certain deposits are in themselves not worth working except in the zone of secondary enrichment; perhaps, strictly speaking, there is something to be said for this argument, but it certainly does not make for a clear understanding of the subject. If distinctions are to be drawn between the deposit itself and its more or less altered outcrop, confusion is bound to result. In fact, one of the great faults of the work lies in the author's failure to appreciate that in dealing with such phenomena as ore deposits, where a natural system of classification is practically impossible, broad lines must be followed; even so, there will be numerous border cases which every student of the subject will treat on somewhat different lines. One of the most striking points in the book, which well illustrates what has just been said, is the minute subdivision of mineral veins based upon differences, and sometimes small differences, in their mineral contents. In this Dr. Berg has followed Dr. Beck, the need for simplification apparently not having occurred to him. The whole of the treatment of mineral veins may be described as somewhat antiquated, seeing that over one-third of the work is devoted to fissure veins. This diffuse treatment is reminiscent of the days when the overwhelming proportion of all metallic minerals (with the exception of iron ores) was derived from fissure veins, as was the case a century ago. To-day, on the other hand, the output from veins is relatively unimportant, and the author does not seem to have realised how great the change has been in this respect.

The author divides his subject into the following main groups:

I. Magmatic segregations.
II. Contact deposits.
III. Mineral veins.

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